

October 30, 2006

The Honorable David M. Walker
Comptroller General
Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Walker:

Five years ago, we learned a hard lesson about our nation's vulnerability to bio-terrorism. During September and October of 2001, letters laced with anthrax spores were mailed to the Capitol Hill offices of two U. S. Senators and to members of the media. United States Postal Service (USPS) facilities in Connecticut, New York, New Jersey, Florida, Washington, DC, and elsewhere were found to be contaminated. Twenty-two people contracted anthrax disease, and five of them died.¹

Since Fiscal Year 2001, Congress and the Administration have supported a dramatic expansion of the scale and diversity of basic and applied research and development (R&D) by civilian and military agencies, government-funded laboratories, academia, and private industry on all aspects of the biological threat. In a recent report, the Center for Arms Control and Non-Proliferation estimates that eleven federal departments or agencies will have spent or allocated more than \$18 billion for biodefense research, development, testing, and evaluation by the end of Fiscal Year 2007, a cumulative total that includes programs focused on detection technologies.²

Having reached the fifth anniversary of the anthrax attacks, we believe Congress and the Administration would benefit from a comprehensive assessment by the Government Accountability Office (GAO) of currently deployed airborne or environmental biological threat detection technologies and those that are planned or under development. This includes the BioWatch program at the Department of Homeland Security (DHS), the Biohazard Detection System operated by the USPS, and those technologies under development or described as near-term, mid-term and long-term R&D projects in recent submissions to Congress by the Department of Defense.³

Since 2002, GAO has produced technology assessments that provide objective information on the risks, challenges and potential of promising technologies that we hope will someday help prevent catastrophic terrorist attacks. This body of work includes a January 2006 technology assessment of radiation detectors used to screen cargo containers.⁴

We now request that GAO conduct a comprehensive technology assessment of similar scope that provides a clear survey and analysis of the relevant research, development, testing, and evaluation (RDT&E) and deployment programs for biological detection technologies across the federal government, academia and private industry. This assessment should include currently fielded detection technologies and those under development.⁵ It should also include current mechanisms and strategies for validating biological threats; for testing and evaluating detection technologies; and for ensuring the integration of new or cross-cutting knowledge generated by basic and applied R&D on all types of chemical, biological, radiological, nuclear detection technologies, and high explosive threats.

We ask that GAO focus on six questions:

1. Does the federal government have a methodology in place for determining the current and future performance requirements for biological detection technologies for military and civilian programs? Is the requirements determination methodology effective? Are the performance requirements identified by this methodology being applied to establish priorities for biological detection research and development?
2. How effective are biological detection technologies currently available in military and civilian programs against validated biological threats? How effective are these detection technologies likely to be against potential future threats? What technologies are currently in development?
3. What are the policy, cost, and implementation considerations associated with developing, deploying, and using biological detection technologies now and in the future?
4. What are the policy, cost, and implementation issues associated with conducting R&D on biological detection technologies in academia and private industry, including the utilization of federally-developed R&D and the need for access to sample pathogens?
5. Does the federal government have programs in place to test and evaluate biological detection technologies? What steps have been taken by agencies to assure that these mechanisms are effective? What metrics are used to evaluate the technologies prior to acquisition?
6. Does the federal government have mechanisms for integrating knowledge developed by basic and applied R&D in government, academia, and private industry for detection of all types of biological, chemical, radiological, nuclear and high explosive agents and for coordinating, managing and setting R&D priorities across all agencies? Are these mechanisms effective?

Given the complexity of the subject and the need to gather information from many sectors of the federal government, academia and the private sector, we recognize that it may be necessary and prudent for GAO to accomplish this technology assessment with a

sequence of reports. As you proceed, we ask that GAO apprise our Committees of any external impairments that could potentially limit the scope of this technology assessment or delay its completion in a timely manner.

If you have any questions regarding this request, please contact us or our staff, and please ensure that all correspondence is sent to the committees or staff noted below.⁶

Sincerely,

Susan M. Collins
United States Senator

Joseph I. Lieberman
United States Senator

William H. Frist
United States Senator

Harry Reid
United States Senator

Michael B. Enzi
United States Senator

Edward M. Kennedy
United States Senator

Judd Gregg
United States Senator

Robert C. Byrd
United States Senator

Richard Burr
United States Senator

Daniel K. Inouye
United States Senator

Arlen Specter
United States Senator

Patrick J. Leahy
United States Senator

Jeff Bingaman
United States Senator

Daniel K. Akaka
United States Senator

John Linder
United States Representative

Bennie G. Thompson
United States Representative

Sherwood Boehlert
United States Representative

Bart Gordon
United States Representative

James R. Langevin
United States Representative

Rush Holt
United States Representative

Ike Skelton
United States Representative

Marty Meehan
United States Representative

Norman D. Dicks
United States Representative

¹ Governmental Accountability Office (GAO-05-251), *Anthrax Detection: Agencies Need to Validate Sampling Activities in Order to Increase Confidence in Negative Results*.

² Center for Arms Control and Non-Proliferation Biological and Chemical Weapons Control Program, *Federal Funding for Biological Weapons Prevention and Defense, Fiscal Year 2001 to 2007*.

³ *Department of Defense Chemical and Biological Program, Annual Report to Congress*, March 2006, pages 17-18.

⁴ Governmental Accountability Office (GAO-06-68SU), *Securing the Transport of Cargo Containers*.

⁵ *Department of Defense Chemical and Biological Program, Annual Report to Congress 2006*, page 9: “Several organizations within the U.S. Government are developing CBRN defense technologies. Five organizations with which the CBDP currently has formal coordination efforts include: (1) the Defense Advanced Research Projects Agency (DARPA), (2) the Counterproliferation Program Review Committee (CPRC), (3) the Technical Support Working Group (TSWG), (4) the Department of Homeland Security (DHS) Science and Technology Directorate, and (5) National Institute of Allergies and Infectious Diseases (NIAID).”

⁶ Senate Committee on Homeland Security and Governmental Affairs: Brandon Milhorn and Allison Boyd (Majority), Michael Alexander, Jim McGee, and Aaron Firoved (Minority); Office of the Majority Leader: Elizabeth Hall; Office of Minority Leader: Kate Leone; House Homeland Security Committee: Diane Berry and Colleen O’Keefe (Majority), Chris Beck and Marla Greenberg (Minority); Senate Committee on Commerce, Science and Transportation: Dabney Hegg (Minority); House Science Committee Tali Bar-Shalon (Majority), Dan Pearson (Minority); Senate Appropriations Subcommittee on Homeland Security: Scott Nance (Minority); Senate Committee on the Budget: Richie Weiblinger (Majority); Senate Judiciary Committee Joe Jacquot (Majority), Julie Katzman (Minority); Senate Committee on Health, Education, Labor and Pensions, Katherine B. McGuire and Jennifer Byrning (Majority), David Bowen and Jonathan Epstein (Minority); House Armed Services Committee: William Natter, (Minority); Chris Gaston (Rep. Rush Holt); Colin Sheldon (Rep. Norman D. Dicks)